UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/711,619	11/13/2000	Gurmukh S. Johal	35718/205458	7883

29122 7590 05/21/2002

ALSTON & BIRD LLP
PIONEER HI-BRED INTERNATIONAL, INC.
BANK OF AMERICA PLAZA
101 SOUTH TYRON STREET, SUITE 4000
CHARLOTTE, NC 28280-4000

EXAMINER	
KRUSE, DAVID H	
ART UNIT	PAPER NUMBER
1638	

DATE MAILED: 05/21/2002

12

Please find below and/or attached an Office communication concerning this application or proceeding.

File Copy

Office Action Summary	Application No.	Applicant(s)	
	09/711,619	JOHAL ET AL.	
	Examiner	Art Unit	
	David H Kruse	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 March 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) *25-32* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4 and 7* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-24 and SEQ ID NO: 7 in Paper No. 11, filed 5 March 2002 is acknowledged. The traversal is on the ground(s) that the SEQ ID NOs: 1, 2, 3, 7 and 8 are closely related and that it would not be a serious burden to examine all of the sequences together (pages 3 and 4 of the Response). This is not found fully persuasive because the sequences of SEQ ID NOs: 1, 2 and 3 are compositionally, structurally and functionally distinct from those of SEQ ID NOs: 7 and 8, which encode the wild type Dw3 gene from sorghum. The Examiner will examine the elected claims to the extent that they read on SEQ ID NOs: 7 and 8, and a polynucleotide that encodes the amino acid sequence set forth in SEQ ID NO: 9. The Examiner accepts Applicant's arguments that at least the genomic and cDNA sequences should be examined together. The Examiner acknowledges Applicant's argument that claims 21-24 should have been included in Group I of the restriction requirement, and will be examined with the elected invention. The Examiner notes that Applicant did not traverse the restriction of Groups II and III.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 25-32 and SEQ ID NOs: 1, 2 and 3 are withdrawn from further consideration pursuant to 37 CFR § 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 11.

3. This application contains claims 25-32, drawn to an invention nonelected with traverse in Paper No. 11. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR § 1.144) See MPEP § 821.01.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR § 1.48(b) and by the fee required under 37 CFR § 1.17(i).

Priority

5. Applicant's claim for domestic priority under 35 U.S.C. § 119(e) is acknowledged. However, the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. § 112 for claims 1-24 of this application. Provisional Application 60/165,176 fails to provide an adequate written description of SEQ ID NOs: 7, 8 or 9. Hence, the instant application is only entitled to the priority date of 13 November 2000.***Information Disclosure Statement***

6. The information disclosure statement filed 16 April 2001 as Paper No. 4 contains a reference to U.S. Patent Application 09/711,562, which has been considered but is an improper reference to print on the face of the patent.

Claim Objections

7. Claims 1, 4, 19 and 24 are objected to because of the following informalities: The instant claims comprise references to non-elected invention and should be amended accordingly.

Claim 10 is objected to because at line 2, the term "Brassica" should be italicized or underlined to properly denote a generic name.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. § 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 4-17 and 19-24 are rejected under 35 U.S.C. § 101 because the claimed invention appears to be inoperable and thus lacks patentable utility.

This rejection is made to the extent that the claimed invention reads on a transformed plant, plant cell, or method of modifying the growth of a plant comprising a nucleotide having only 19 contiguous nucleotides of the nucleotide sequence set forth in SEQ ID NO: 7 or 8, in particular SEQ ID NO: 7. SEQ ID NO: 7 comprises intron sequences that do not function to encode an amino acid, and the claims are drawn to any 19 contiguous nucleotides of said sequence, including intron sequences. Hence, it is unclear form the instant specification what utility a plant or plant cell would have comprising 19 contiguous nucleotides of an intron of SEQ ID NO: 7 operable linked to a promoter, or how one of skill in the art would modify the growth of a plant using such a nucleotide.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

11. Claims 1-24 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

At claim 1(m), the phrase "that hybridizes under stringent conditions" is indefinite because it is unclear what the metes and bounds of this limitation are in view of Applicant's definition on page 19 paragraph 2 of the Specification.

At claim 2, line 2, the phrase "nucleotide sequence" is indefinite because claim 1 is directed to "an isolated nucleotide molecule" having "a nucleotide sequence", emphasis added.

At claim 3, line 3, the phrase "pathogen-preferred promoters" is indefinite because it is unclear if Applicant is claiming an expression cassette for expression of a nucleotide sequence in a pathogen, or a plant to which claim 2 is directed. The limitation -- pathogen-inducible promoters -- would be more appropriate (see page 33, lines 25-28 of the specification).

At claim 4, line 2, the phrase "nucleotide sequence" does not denote a composition of matter, merely arbitrary information, which cannot be used to transform a plant. The limitation -- nucleotide molecule --, as in claim 1, would obviate this rejection. Additionally, Applicant would have to amend the phrase "nucleotide sequence is selected" at line 3 to read -- nucleotide molecule has the sequence selected --.

At claim 4(m), the phrase "that hybridizes under stringent conditions" is indefinite because it is unclear what the metes and bounds of this limitation are in view of Applicant's definition on page 19 paragraph 2 of the Specification.

At claim 5, the phrase "pathogen-preferred promoters" is indefinite because it is unclear if Applicant is claiming an expression cassette for expression of a nucleotide sequence in a pathogen, or a plant to which claim 2 is directed. The limitation -- pathogen-inducible promoters -- would be more appropriate (see page 33, lines 25-28 of the specification).

Claim 18 is rejected under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted step is: selecting a transformed organisms having modified growth. In addition, at line 4, the phrase "capable of driving" is indefinite because it does not state a positive feature of the claimed method, merely suggesting function, said function being required for practice of the claimed method.

At claim 18, line 2, the phrase "nucleotide sequence" does not denote a composition of matter, merely arbitrary information, which cannot be used to transform a plant. The limitation -- nucleotide molecule --, as in claim 1, would obviate this rejection. Additionally, Applicant would have to amend the phrase "nucleotide sequence operably linked" at line 4 to read -- nucleotide molecule operably linked --.

At claim 19, line 2, the phrase "nucleotide sequence" does not denote a composition of matter, merely arbitrary information, which cannot be used to transform a plant. The limitation -- nucleotide molecule -- is suggested, see above.

At claim 19(m), the phrase "that hybridizes under stringent conditions" is indefinite because it is unclear what the metes and bounds of this limitation are in view of Applicant's definition on page 19 paragraph 2 of the Specification.

At claim 20, line 1, the phrase "nucleotide sequence" does not denote a composition of matter, merely arbitrary information, which cannot be used to transform a plant. The limitation -- nucleotide molecule -- is suggested, see above.

At claim 24, line 2, the phrase "nucleotide sequence" does not denote a composition of matter, merely arbitrary information, which cannot be used to transform a plant. The limitation -- nucleotide molecule --, as in claim 1, would obviate this rejection. Additionally, Applicant would have to amend the phrase "nucleotide sequence is selected" at line 3 to read -- nucleotide molecule has the sequence selected --.

At claim 24(m), the phrase "that hybridizes under stringent conditions" is indefinite because it is unclear what the metes and bounds of this limitation are in light of Applicant's definition on page 19 paragraph 2 of the Specification.

12. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

13. Claims 1-24 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant claims an isolated nucleotide molecule having a nucleotide sequence having at least 80% identity to the sequence of SEQ ID NO: 7 or 8, a compliment of said nucleotide molecule, or a nucleotide molecule that hybridizes under "stringent conditions" to SEQ ID NO: 7 or 8. In addition, Applicant claims plants, plant cells and a method of modifying the growth of a plant comprising transforming a plant with said nucleotide molecule.

Applicant describes the sorghum Dw3 gene, exemplified in SEQ ID NOs: 7 and 8, encoding the polypeptide of SEQ ID NO: 9. Applicant also describes mutations of said Dw3 gene that lead to dwarfing in sorghum, when present in a homozygous state in the sorghum plant (these examples are directed to a non-elected invention).

Applicant does not sufficiently describe the genus of nucleotide molecules having at least 80% identity to SEQ ID NOs: 7 and 8, other than those directed to a non-elected invention, or other nucleotide molecules that would hybridize under "stringent conditions" to a nucleotide molecule having the sequence of SEQ ID NO: 7 or 8. In particular, the genus of nucleotide molecules, that could be used in a method of modifying the growth of a plant that encode a P-glycoprotein that functions to control growth in said plant, is not adequately described.

Hence, it is unclear from the instant specification that Applicant was in possession of the invention as broadly claimed. See *University of California V. Eli Lilly and Co.*, 43 USPQ2d 1398 (Fed. Cir. 1997), which teaches that the disclosure of a process for obtaining cDNA from a particular organism and the description of the encoded protein fail to provide an adequate written description of the actual cDNA from

that organism which would encode the protein from that organism, despite the disclosure of a cDNA encoding that protein from another organism. See *Amgen inc. v Chagai Pharmaceutical co.*, 18 USPQ 2d 1016 (Fed. Cir. 1991), which teaches that the conception of a chemical compound requires the inventor to be able to define the compound so as to distinguish it from other materials, and to describe how to obtain it rather than simply defining it solely by its principle biological property; thus, when an inventor of a gene, which is a chemical compound albeit a complex one, is unable to envision detailed constitution of the gene so as to distinguish it from other materials, as well as a method of obtaining it, the conception is not achieved until a reduction to practice has occurred, and until after the gene has been isolated.

14. Claims 18-23 are rejected under 35 U.S.C. § 112, first paragraph, because the specification, while being enabling for a method for modifying the growth of a sorghum plant comprising transforming said sorghum plant with a construct comprising a nucleotide molecule having the nucleotide sequence of SEQ ID NO: 7 or 8 in either the sense or antisense configuration, does not reasonably provide enablement for a method of modifying the growth of any organism or specifically a plant comprising transforming said organism with any nucleotide molecule encoding a p-glycoprotein that functions to control growth of an organism. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Applicant claims a method of modifying the growth of an organism comprising transforming an organism with a nucleotide molecule encoding a P-glycoprotein wherein

said P-glycoprotein functions to control growth of an organism. In addition, Applicant claims a method of modifying the growth of a plant comprising transforming said plant with a nucleotide molecule having at least 80% identity to SEQ ID NO: 7 or 8, or its complement or which hybridizes under "stringent conditions" to said nucleotide molecule.

Applicant teaches that the Dw3 gene product is involved in regulating the growth of sorghum, and that mutation in said gene leads to a dwarf phenotype of sorghum (Example 2, pages 46-48 of the Specification).

Applicant does not teach other P-glycoprotein encoding genes, within the scope of the elected invention, that have at least 80% identity to SEQ ID NO: 7 or 8, or its complement or which hybridizes under "stringent conditions" to said nucleotide molecule, that could be used in the claimed method of modifying the growth of an organism or more specifically a plant.

In re Wands, 858F.2d 731, 8 USPQ2d 1400 (Fed. Cir. 1988) lists eight considerations for determining whether or not undue experimentation would be necessary to practice an invention. These factors are: the quantity of experimentation necessary, the amount of direction or guidance presented, the presence or absence of working examples of the invention, the nature of the invention, the state of the prior art, the relative skill of those in the art, the predictability or unpredictability of the art, and the breadth of the claims.

Applicant has provided limited guidance in terms of nucleotide molecules that are useful in the claimed method, within the scope of the claimed invention. The instant

specification only provides specific guidance for the isolation and use of the sorghum Dw3 gene. It is unclear from the instant specification that the sorghum Dw3 gene would function in an identical manner in another plant, as it does in sorghum, to regulate growth, or that transforming any other plant with a construct comprising the sorghum Dw3 gene would have any effect on the growth of said plant, other than sorghum. The example of transforming maize in Example 3 on pages 48-51 appear to be prophetic, and does not represent a working example of the claimed invention. Hence, it would have required one of skill in the art at the time of Applicant's invention undue trial and error experimentation to screen through a myriad of nucleotides having at least 80% identity to either SEQ ID NO: 7 or SEQ ID NO: 8, or that would hybridize to either SEQ ID NO: 7 or 8 under "stringent conditions", identify those that encode a P-glycoprotein that functions to control the growth of an organism, transform a myriad of plants with the identified nucleotide molecules to determine which nucleotide molecule will modify the growth of what organism, i.e. a plant, in order to practice Applicant's invention within the full scope of the instant claims.

To the extent that the claims read on the use of antisense constructs to transform an organism, i.e. a plant, the instant method is only enabled for a method of modifying the growth of sorghum. The instant specification provides no evidence that transforming a plant, other than sorghum, with an antisense construct having a nucleotide sequence that is complementary to SEQ ID NO: 7 or 8, would in fact modulate growth of said plant. The art teaches that transforming plants with heterologous antisense constructs can lead to unpredicted molecular and biochemical

phenotypes, and is not predictable without empiric evidence to the contrary (see Colliver *et al* 1997, Plant Molecular Biology 35:509-522, in particular the Abstract on page 509). Hence, it would have required one of skill in the art at the time of Applicant's invention undue trial and error experimentation to screen through a myriad of nucleotides having at least 80% identity to either SEQ ID NO: 7 or SEQ ID NO: 8, or that would hybridize to either SEQ ID NO: 7 or 8 under "stringent conditions", identify those that encode a P-glycoprotein that functions to control the growth of an organism and produce antisense constructs, transform a myriad of plants with the constructs to determine which nucleotide molecule will modify the growth of what organism, i.e. a plant, in order to practice Applicant's invention within the full scope of the instant claims.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by Dudler *et al* 1992 (The Journal of Biological Chemistry).

The indefiniteness of the limitation "stringent conditions" at claim 1(m) is discussed supra. Hence, said limitation is being interpreted to its fullest breadth.

Dudler discloses an isolated nucleotide molecule comprising a nucleotide sequence that would hybridize under stringent conditions to SEQ ID NO: 7 or 8 (see Figure 2 on page 5884). The nucleotide molecule of Dudler encodes a P-glycoprotein

of *Arabidopsis thaliana*. Hence, Dudler has previously disclosed all of the claim limitations.

17. Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by Wang *et al* 1996 (Plant Molecular Biology 31:683-687).

The indefiniteness of the limitation "stringent conditions" at claim 1(m) is discussed supra. Hence, said limitation is being interpreted to its fullest breadth.

Wang discloses an isolated nucleotide molecule comprising a nucleotide sequence that would hybridize under stringent conditions to SEQ ID NO: 7 or 8 (see Figure 1 on page 684). The nucleotide molecule of Wang encodes a P-glycoprotein of potato. Hence, Wang has previously disclosed all of the claim limitations.

Claim Rejections - 35 USC § 102/103

18. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

19. Claims 1-24 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Sidler *et al* 1998 (The Plant Cell 10:1623-1636).

The indefiniteness of the limitation "stringent conditions" in the claims is discussed supra. Hence, said limitation is being interpreted to its fullest breadth.

Sidler discloses an isolated nucleotide molecule that would hybridize under stringent conditions to SEQ ID NO: 7 or 8 (see page 1633, left column, second paragraph). Sidler discloses complementary sequences of said isolated nucleotide molecule, an expression cassette comprising said sense or antisense nucleotide molecule operable linked to a constitutive promoter and plants transformed with said cassette. Sidler discloses that the isolated nucleotide molecule encodes a P-glycoprotein that functions to control the growth of an organism (see pages 1633-1634, and page 1623). Sidler discloses a method of modifying the growth of a plant comprising transforming a plant with an antisense construct operably linked to a constitutive promoter that produces an antisense transcript that modifies the growth of a plant, specifically *Arabidopsis thaliana* (see the abstract on page 1623). Sidler also discloses a method of modifying the growth of a plant comprising transforming a plant with a sense construct, leading to the production of longer roots due to overexpression of the gene product (see page 1626).

Sidler does not disclose transformed monocot plants, per claims 7, 8, 14, 15, 22 and 23.

Applicant admits that transformation protocols for various plants, including monocots, were well known in the art at the time of Applicant's invention (see pages 34-37 of the Specification).

Hence, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of Applicant's invention to use known transformation methods to transform plants other than *Arabidopsis thaliana*, as taught by Sidler, including monocot plants

such as maize, wheat or rice. In addition, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of Applicant's invention to use the teachings of Sidler to identify other P-glycoproteins that function to modify growth in a plant that would hybridize under "stringent conditions" to a nucleotide molecule having the sequence of Applicant's SEQ ID NO: 7 or 8, as broadly claimed. Sidler's success at isolating the *Arabidopsis thaliana* AtPGP1 gene encoding a P-glycoprotein functionally involved in plant growth, transformation with both sense and antisense constructs, showing modification of growth, would have motivated one of ordinary skill in the art to identify other plant P-glycoproteins and transform other plants. The success of Sidler would have given one of ordinary skill in the art a reasonable expectation of success.

Double Patenting

20. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

21. Claims 1-24 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-18, 20-22 and 29 of copending Application No. 09/711,562. Although the conflicting claims are not

identical, they are not patentably distinct from each other because both applications claim an isolated nucleotide molecule that would inherently to each other hybridize under stringent conditions, plants and plant cells transformed therewith, and a method of modifying the growth of a plant comprising said nucleotide sequence. Applicant admits that the sorghum Dw3 gene of the instant invention is an ortholog of the Br2 gene of maize of the copending application and that the Br2 gene of maize was used to identify stable mutant Dw3 alleles in sorghum (see page 45, second paragraph of the instant specification).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

22. No claims are allowed.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (703) 306-4539. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Amy Nelson can be reached at (703) 306-3218. The fax telephone number for this Group is (703) 872-9306 Before Final or (703) 872-9307 After Final.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Kim Davis whose telephone number is (703) 305-3015.

David H. Kruse, Ph.D.
17 May 2002

DAVID T. FOX
PRIMARY EXAMINER
GROUP ~~180~~ 1638